



December 22, 2016

Ms. Sheryl Bilbrey
Director, Office of Environmental Cleanup
Environmental Protection Agency – Region 10 Office
Suite 900, 1200 6th Avenue
Seattle, WA 98101

Dear Sheryl,

We are writing today as a relatively urgent follow-up to recent correspondence between the Environmental Protection Agency (EPA) and Teck American Incorporated (TAI), and further to our discussions regarding additional meetings to assist with our mutual goal of expeditiously advancing the Upper Columbia River (UCR) Remedial Investigation & Feasibility Study (RI/FS) process through to completion under the terms of the Settlement Agreement. While we appreciate EPA's efforts to work with TAI and move forward on what is already a 10 year and \$80 million process, there are recent actions taken by EPA that TAI strenuously objects to and which must be addressed.

We cover these concerns below and propose some remedies/next steps, including convening a broader path-forward session as soon as practicable in the New Year. This meeting is necessary in order to discuss carefully where we are in the RI/FS process as outlined in the Statement of Work and the RI/FS Work Plan, the steps remaining to complete the RI/FS process, the timelines in which these steps can reasonably be accomplished, and how we will work together to accomplish them.

So that all parties, including new(er) participants such as both of us and Kathryn Cerise, are working from the same understanding, we recap both pertinent background and some of our specific concerns below beginning with the treatability study letter from Kathryn Cerise.

December 14, 2016 letter regarding sediment treatability study

The December 14, 2016 letter from Kathryn Cerise to Kris McCaig proposes that a technical meeting be scheduled the week of January 30, 2017 "in accordance with Task 5 of the Settlement Agreement" to discuss "the need, scope, design and implementation of [sediment] treatability studies" for the Upper Columbia River (UCR) Site. While the letter proposes a meeting on the need for a sediment treatability study, the balance of the letter and attachment makes clear that EPA's Project Manager has already concluded that such a study is necessary. This was a surprising conclusion and one that TAI fundamentally objects to at this stage.

More specifically, a proposal to conduct a sediment treatability study at this point in the UCR RI/FS, and a conclusion that such a study is necessary, are premature, technically indefensible, and inconsistent with the Settlement Agreement, EPA's National Contingency Plan (NCP) regulations, and applicable EPA guidance. The Settlement Agreement provided that the UCR RI/FS would be governed by the "principles of risk-based analysis, bioavailability, empirical testing, and field confirmation." Requesting treatability studies to support remedial action now – before risk assessment is substantially underway, much less complete – violates these principles. Nor was the "need" for such a study determined "in consultation with TCAI" as required by Task 5 of the Settlement Agreement. While we appreciate EPA's willingness to discuss this topic, the declarative statements in the letter on findings of unacceptable benthic risk and thus the broader proposed basis for undertaking a technical meeting on treatability studies, are not in keeping with the processes noted above.

As you know, the UCR Site is a very large site – some 150 river miles from the Canada-U.S. border to the Grand Coulee Dam. While some of us – both in EPA and TAI – are relatively new to this project, EPA has been overseeing and TAI has been performing the RI/FS for the UCR Site for more than a decade. Under the Settlement Agreement and consistent with the NCP and EPA guidance, the purpose of this enormous investigation is to characterize the site, assess risk, and if – and only if – there is unacceptable risk to human health or the environment, to evaluate the feasibility of various response actions. Given the scale and complexity of the Site, as well as the complexity of the consultation process with the Participating Parties and the often-protracted duration of EPA's review of various deliverables, it has taken more years than any of us had anticipated to complete this investigation. Yet, Teck has funded more than \$80,000,000 for this process, in good faith, in the express contractual assurance that EPA would adhere to the principles and processes set out in the Settlement Agreement.

Most relevant to this specific topic, it took nearly three years to develop the Quality Assurance Project Plan (QAPP) for the UCR RI/FS Phase 2 Sediment Study pursuant to which EPA prescribed nearly every detail about how the study was to be conducted. This comprehensive sediment chemistry and toxicity study required by the Baseline Ecological Risk Assessment Work Plan is critical to assessing whether there is unacceptable risk associated with metals in UCR sediments. EPA not only oversaw the design of and approved the QAPP for the Phase 2 Sediment Study, but also the field work conducted in 2013, and the laboratory analytical work, including bioassays to measure toxicity, which were completed over the following nearly two-year period. Windward Environmental produced the draft Data Summary Report (DSR), which TAI delivered to EPA in December 2015 for review and approval, and EPA in turn again solicited comments from the Participating Parties. A year after submission, on December 9, 2016, EPA provided comments on the DSR.

Surprisingly, the tone of many of the comments on the Phase 2 Sediment Study DSR gives the impression that EPA had nothing to do with the study, when in fact EPA has directed and overseen every aspect of it, including soliciting and factoring in comments from the Participating Parties throughout. TAI's process to address the comments from EPA is underway. Since the Phase 2 Sediment Study constitutes a comprehensive investigation of sediments in the UCR under EPA oversight, it is the critical study for assessing whether there are unacceptable risks to benthic invertebrates associated with exposure to metals in UCR sediments. Given the in-progress status of this critical study, the ecological risk assessment – for which EPA oversaw and approved the Work Plan – is necessarily in its infancy. Thus, there has not yet been a proper assessment of the risk that may or may not be posed by the presence of slag in sediments, and certainly not a risk assessment of the rigor required by the NCP, EPA guidance, and sound science.

Nevertheless, the December 14th letter bypasses nearly the entirety of the risk assessment process and procedure to summarily conclude that the Phase 2 Sediment Study and a non-RI study completed confidentially by the U.S. Geological Survey without EPA oversight and without input by TAI “demonstrate that metal exposure due to slag presents unacceptable risk to the benthic community in the portion of the UCR Site between the US/Canada border and Marcus Flats, and that remedial action to address this risk is needed.” Such a substantial conclusion could and should only be the product of a risk assessment process that has not yet taken place for this Site. As we have also expressed, we have serious concerns about the technical integrity of the USGS study, which was not overseen by EPA and, in any case, was not designed for risk assessment. Regardless, a proper risk assessment – as required by EPA’s Baseline Ecological Risk Assessment Work Plan – must be the basis for any request for sediment treatability studies.

The letter further summarily concluded “that the existing Site data is insufficient to adequately evaluate and design optimal remedial alternatives. Based on EPA Guidance, if existing site data is insufficient to adequately evaluate alternatives, a treatability test is necessary to fully characterize and evaluate potential alternatives.” There is no substantive basis for making this statement at this time. While it may or may not ultimately be correct that existing Site data are insufficient to adequately evaluate and design remedial alternatives – it is too soon to know – such a conclusion should not even be made at this point because it presumes that the risk assessment has been done, which it has not.

TAI is greatly disappointed by the content of this letter and objects to both the findings referenced and the alarming deviation from the contractual procedures that govern the RI/FS process. Not only are these summary determinations premature and not reflective of the investigative and analytical process that has been, and is required to be, undertaken under the Settlement Agreement, but predictably there is now a public disclosure dynamic that must be addressed given the media release from the Colville Tribes on this letter.

Please note that TAI will provide EPA a separate and more specific set of comments on the “Statement of Finding [sic] for Phase 2 Sediment Toxicity Results” attached to Ms. Cerise’s letter in due course. This will include analysis regarding USGS’s non-RI/FS study, which has not been subject to meaningful or transparent review, yet, on which many of the findings troublingly rely.

Having registered our serious concerns with the letter, we do agree that a technical meeting the week of January 30, 2017 to discuss sediments is warranted and appreciate that EPA is willing to move this forward. TAI will ensure that the appropriate RI/FS technical personnel are present. In order to address some of our ongoing concerns, and to ensure that the meeting is structured in a manner that will facilitate dialogue, we also request that the meeting include the UCR Technical Team from EPA headquarters and labs identified in Exhibit B to the Settlement Agreement or appropriate replacements. We would propose that the initial conversation focus on the “need” component of the technical meetings proposed by EPA – allowing a much-needed initial technical discussion of both the draft Phase 2 Sediment Study Data Summary Report comments and the technical and procedural issues around the USGS study. In advance of the meeting, TAI will work with EPA to establish a detailed technical meeting agenda.

More generally, TAI appreciates EPA’s confirmation that the goal of getting to a Record of Decision (ROD) in an expeditious manner is a common one. However, we disagree strenuously that implementing feasibility studies now – prior to risk assessment – will reduce the overall timeline of the RI/FS. Rather, ordering such an action presumes the results of the risk assessment without actually doing the work, and

diverts attention and resources of all involved away from the rigorous risk assessment process to which we agreed and which the public deserves. Instead, we hope that the agency will be expeditious in its review and approval of the revised Phase 2 Sediment Study Data Summary Report and the Baseline Ecological Risk Assessment when they are submitted, as well as processing other outstanding deliverables that have been required by EPA.

A proposal to implement a sediment treatability study now, without completing or even initiating, the risk assessment process detailed in the Settlement Agreement is inconsistent with all the good work we have done together to date, inconsistent with the agreement we negotiated with EPA in good faith and simply is not acceptable. As you will have seen, the Colville Tribes have released the contents of the letter as reflecting a conclusion that at best, is not supported by the Settlement Agreement process, and in our view may not withstand proper scientific scrutiny. Given the work that remains to be done on the RI/FS in accordance with the Settlement Agreement, we suggest that this situation should be a concern for EPA as well as for Teck.

Level of Effort letters concerning upland soils investigations

TAI received a letter dated December 2, 2016 directing TAI to develop a background soils study and a letter dated December 8, 2016 directing TAI to fund a plant tissue study. As we have expressed previously, studies pertaining to the uplands area should have been sequenced after a delineation study was conducted pursuant to paragraph 3.1.3 of the Statement of Work, which has not yet occurred. These new uplands area studies should not precede a proper delineation of the contaminant footprint attributable to aerial emissions from the Trail Smelter. The Statement of Work is clear that a "Delineation of [the] Upland Aerial Footprint Reflecting Atmospheric Deposition of Trail Facility Emissions" study would be conducted and that that effort would delimit the scope of RI/FS field sampling and studies in the uplands. Without having completed this delineation study, these directives call for work that, once again, is out of step with the process contemplated by the SOW, and is not technically sound. The recent Ninth Circuit decision on air emissions makes it even more important that we reach a common understanding regarding the scope of the uplands studies called for by the Settlement Agreement.

We appreciate EPA's agreement to suspend the deadlines on these directives pending a technical meeting to discuss delineation. We are optimistic that this meeting will help clarify the technical issues and inform our path forward.

Based on our recent correspondence and conversations, we would propose the following next steps to advance the dialogue and work through some of the challenges detailed above:

Next Steps

Sediments Technical Meeting

In response to the December 14, 2016 letter, Kris McCaig will work with Ms. Cerise to organize a Technical Meeting on sediments the week of January 30, 2017. Given our significant concerns and the EPA's stated desire to advance treatability studies, your assistance will be needed to ensure the agenda is scoped appropriately and the participation of the UCR Technical Team identified in Exhibit B of the Settlement Agreement or appropriate replacement, occurs. We believe that having these additional technical team members will assist with moving the conversation and evaluation forward - we specifically

ask that such participants be available for the session. Given the complexity of the issues and the substantial work that has been done and remains to be done, we would anticipate that this meeting will be the next in a series of technical meetings on sediments.

Soils Technical Meeting

Ms. McCaig will also coordinate with EPA's Remedial Project Manager Laura Buelow to set the Technical Meeting on delineation the week of January 23, 2017. If you have any concerns or more specific direction with respect to this meeting, please let us know.

Path-Forward Meeting

Finally, we should look for dates in February or early March for the path-forward meeting. As discussed, the purpose of this meeting would be to review in detail where we are in the RI/FS process as outlined in the Statement of Work and the RI/FS Work Plan, the steps remaining to complete the RI/FS process, the timelines in which these steps can reasonably be accomplished, and how we will work together to accomplish them. In light of our serious concerns that EPA is now diverging from the agreed process under the Settlement Agreement, and the Ninth Circuit Court of Appeals' recent decision regarding terrestrial contamination associated with aerial emissions, we recommend that this path-forward meeting include our respective counsel.

We had also discussed EPA visiting the Trail Smelter in British Columbia. We look forward to hosting the EPA, and we would suggest that this visit be coordinated to coincide with the path-forward meeting. After more than a decade of performance, and tens of millions of dollars in studies, it is appropriate and advisable for us all to take stock as we move forward to the next phases of the RI/FS. We believe that the Technical Meetings in January/February on sediments and soils will be informative to that effort.

Sheryl, we have raised some significant concerns in this review letter. However, it is important for Teck to state emphatically that we remain committed to completing the RI/FS under the terms of the Settlement Agreement and working closely with you and EPA staff leads to work through our concerns. We welcome upcoming discussions and ask at this important juncture that EPA maintain its commitment to ensuring the technical and procedural integrity of the process as detailed in the Settlement Agreement.

We look forward to working with you in the New Year.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tom Syer', with a stylized, wavy line extending from the end.

Tom Syer
Director, Government Affairs

cc: Kathryn Cerise, Remedial Project Manager, Environmental Protection Agency
Laura Buelow, Project Manager, Environmental Protection Agency
Peter Rozee, Senior Vice President, Commercial and Legal Affairs, Teck Resources Limited
Kris McCaig, Manager, Environment and Public Affairs, Teck American Incorporated